PROJECT NAME: Uintah County Energy Efficiency Upgrades

RECIPIENT: Uintah County

LOCATION: Vernal, Utah

PURPOSE: This project will provide energy savings associated with recommended upgrades to the mechanical and lighting controls at the Uintah County Building in Vernal Utah.

Uintah County has buildings, part of its county complex, which are anywhere from 26 to 51 years old. The original heating, ventilation and air conditioning (HVAC) equipment is still in use. These units have reached the end of their useful life. The systems are very energy inefficient. At the request of the county, an energy audit has recently been completed by KW Engineering and Rocky Mountain Power. Uintah County is now very conscious of the new premium efficiency units, available on the market, which could decrease the county's carbon footprint and increase cost saving to the taxpayers. Many of the county's lighting fixtures are fluorescent lamps with electronic ballasts. Unfortunately, these are manually controlled. Old incandescent lamps will be replaced with new energy efficient compact fluorescent lamps (CFLs) and old inefficient fixtures will be replaced with energy efficient leading edge technology upgrades to save energy.

There are still sections of the old building heated by a natural gas fired boiler providing hot water to perimeter heating coils. During the cooling season, a 60-ton air-cooled chiller provides chilled water to these same coils. These are pneumatically controlled systems. Consequently, this portion of the building is conditioned 24/7 year round; a highly *inefficient* process.

The annual energy consumption of the facility in 2008 was 1,078,400 kWh/yr. If the proposed energy efficiency measures are implemented the estimated electric saving are 189,725 kWh/yr. The estimated natural gas savings are 306 decatherms. Combined, this will result in a total reduction of 264,390 pounds of carbon dioxide emissions.

AMOUNT: $1,142,800